

Create joints like these with the
Multi-joint™
spacing system

1/4" box joint



3/8" box joint



1/2" box joint



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Multi-joint™ spacing system

Instruction Manual

Introduction

The Multi-Joint™ spacing system takes a simple approach to making box joints, rabbet joints, spline joints, and sliding dovetails. Unlike other spacer jigs, the Multi-joint™ has an MDF core base laminated on both sides so that it stays flat and does not warp. The 24" length makes it easy to clamp onto just about any router table top when making joints with the Multi-joint system™. The hardest part about cutting these types of joints is spacing each cut exactly the same distance apart from one another. With our Multi-joint™ fence spacing system and brass set-up bars, it will give you the exact spacing between two cuts or fifty cuts. The bit, fence and the space between the bit and fence are all the same size. The only thing that needs to be set up is the space between the router bit and fence. That's what makes this system so easy to use. The Multi-Joint™ system works with precision guide bars made from U.H.M.W. for smooth operation. Instead of moving the fence for each cut, you will move the stock on to each guide bar for endless repeatability. Unlike other template jigs you have seen, our jig will work with two different thickness stock as well as two different widths. This means the type of projects you can create are endless. Let us show you how your new Multi-joint™ system works! Please note: all router bits required to use this system are sold separately, due to your Multi-joint™ system uses the most common type router bits that most woodworkers already own.

Read and follow all safety instructions

Caution:

Please read, understand and follow all manufacturers instructions, guidelines and owners manuals that come with your power tools. Peachtree Woodworking Supply Inc. and its subsidiaries assume no liability for accidents or injuries caused by improper use of this product.

Safety Tips

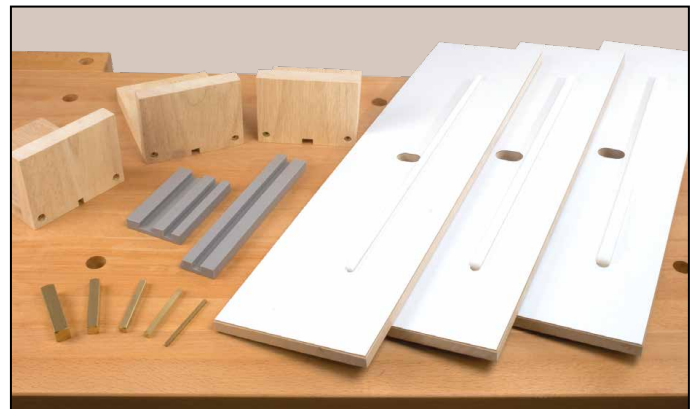
Creating unique joints that look like they have been hand cut will add curb appeal or distinction to any of your projects. To get the best performance and results out of your Multi-joint™, we recommend the following tips:

1. Always wear safety glasses, hearing protection and dress properly. No loose clothing, hair, draw strings or jewelry that might get caught in moving parts.
2. Keep work area clean. Messy work areas invite injuries.
3. Make deeper or larger cuts in multiple passes and NEVER use dull cutters. Forcing a deep cut in one pass or using a dull cutter can result in injury. Inspect cutters for damage or chips in carbide.
4. Make sure router bit is properly installed in router and do not exceed the recommended rpm
5. Keep all safety guards in place.
6. Always unplug your tools before changing cutters
7. Secure you work. Always use at least two clamps to hold your stock. Make sure the clamps do not interfere with the cutters.
8. Make sure the jig is clean with no build up or debris for smooth operation.
9. This system is designed for use on router tables only, do not use with a free hand router set-up.
10. Follow all manufacturer safety guidelines provided with you router.
11. Support wider stock properly so that it does not shift or change the position of the jig

Multi-joint™ spacing system

Package Contents

- 1 Ea. 1/4" spacer fence
- 1 Ea. 3/8" spacer fence
- 1 Ea. 1/2" spacer fence
- 1 Ea. short gray set-up block
- 1 Ea. long gray set-up block (sub-fence)
- 3 Ea. right angle fence
- 5 PC brass set-up bars



Box Joints

This set up method is used for all three size box joints. All you need to do when changing from a 1/4" box joint to a 3/8" box joint, is swap out the 1/4" spacer fence and router bit with the 3/8" spacer fence and bit. Re-align the router bit to the fence with the brass set up bar, then set the height for the stock thickness. You are now ready to cut some box joints. We supply you with the brass set up bars since it is the fastest way to get the precise distance between the sharp router bit edge and the fence, as well as the soft brass will not chip the carbide of your router bits. The example we illustrate in the instruction manual is for 3/8" box joints using 3/8" stock.

Set-up router and router bit:

Make sure your router is unplugged before inserting your bit. Place a 3/8" double flute or 3/8" up cut spiral bit (not included) into your router with approximately 3/4" exposed and secure in place. We prefer to use an up cut spiral bit in all of our cuts, (See **Fig 1.**)



The reason we prefer a spiral router bit is because it produces a smoother cut with less chatter and it cleans out the joint quicker. The up-cut spiral bit will also draw the stock down to the table as well as giving you better control. Once you have your bit installed in your router. Then place your router into the router table (See **Fig. 2.**) Make sure that the router plate does not move side to side in the table because this will throw off the spacing of your joint.

Fig.2



Set-up the spacer fence:

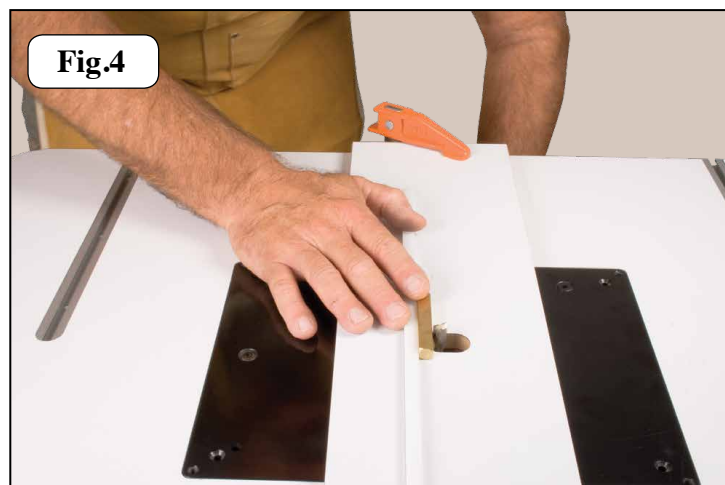
Place the 3/8" spacer fence across the top of your router table, with the router bit in the hole opening with approximately 3/8" of the bit exposed above the platform. Adjust the fence so that the router bit is approximately in the center of the hole. Using a c-clamp or an f-clamp secure one end of the fence to your router table top. (See **Fig. 3**)



We now need to set the space between the router bit and fence to 3/8" using a ruler. You can also do this in a much quicker fashion, which is to use a brass setup bar that is included with your jig. Place the 3/8" brass set-up bar between the router bit and the spacer fence, position the router bit so the widest part or tip of the cutting edge of the router bit is against the brass bar. Then from the end of the spacer fence that is not clamped down, pivot the fence so that the brass bar is touching the fence and the

widest cutting edge of the cutter. Secure the end to the router table top using a second c-clamp or f-clamp. (See **Fig. 4**)

Once you have both ends of your fence clamped to your router top, check the space between the bit and fence by placing the brass bar between the fence and bit. Using your hand, reach under the table and spin the router bit slowly. The brass bar should move ever so slightly when the cutting edge of the router bit contacts it.

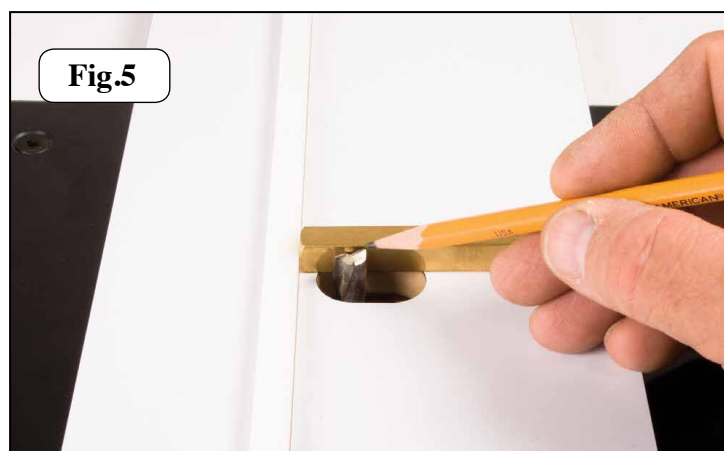


Caution

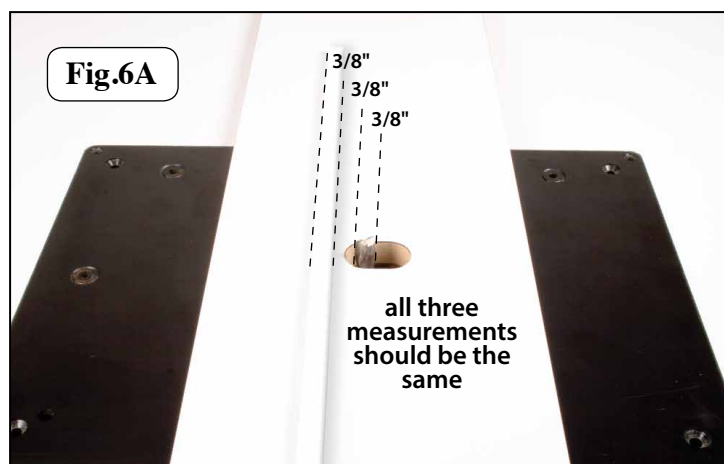
Always make sure router is un-plugged before checking fence location to the router bit. Do not try to spin the router bit by the cutting edge, as this may result in injury. Always spin the bit by reaching under the table and spin the bit from the router collet.

Set-up the router bit height:

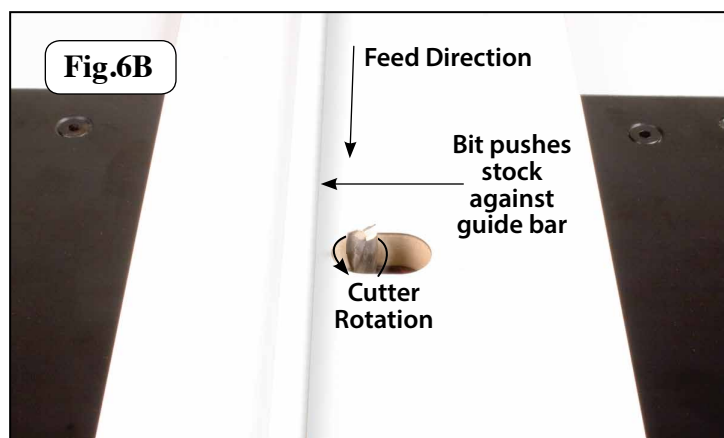
Now we have to set the height of the bit. We are using 3/8" thick stock on all four sides of our project, which means the bit needs to be set at a depth of 3/8". One of the great features of the Multi-joint™ system is, you do not have to use the same thickness stock on all four sides. You can make the sides out of 3/8" stock and the front from 3/4" stock if you prefer. To do this you will need to adjust only the bit height. For example: when you cut the front - the bit would be set at 3/8" and when you cut the side's - the bit would be at 3/4". The handy 3/8" brass set up bar can help you set the height quickly. Set the 3/8" bar next to the router bit and raise the bit until the top cutting edge of the router bit is flush with the brass bar then lock the height in place on your router. (See **Fig. 5**). If desired you can add a 1/32" or more to be sanded flush later. You can also use the thickness of your stock to set the height of the bit. Place it next to the router bit and raise the bit until it is flush with the top of your stock and lock the router in place.



This is what your final set-up of the Multi-joint™ should look like for 3/8" spacer fence (See **Fig. 6A**). When cutting different size finger joints you will use the exact same process. Example: If you are using the 1/4" spacer fence, you will use a 1/4" router bit and adjust the spacing between the UHMW guide bar and the router bit to 1/4".



Make sure that the UHMW guide bar is positioned so the rotation of the router bit pushes the stock against the fence (See **Fig. 6B**). This will give you better control of the cut.



Remove Stock From Right Angle Block

Once you have your router bit height set you need to cut into the right angle push block by a minimum of 1" (See **Fig. 7**). This is done so the router bit does not grab the right angle push block. It will also prevent the stock from tearing on the back edge when the bit exits the cut. We recommend that you support the back edge of any cut made with the Multi-joint™ spacer system.



Caution:

Always make a relief cut on each right angle push block before use. When cutting stock or using the right angle push block, keep your feed hand off-set to the non-router bit side of the guide bar as shown in **Fig. 7**. NEVER position your hand on top of the stock that would be in line with the router bit. Doing so may result in injury.

Stock Preparation

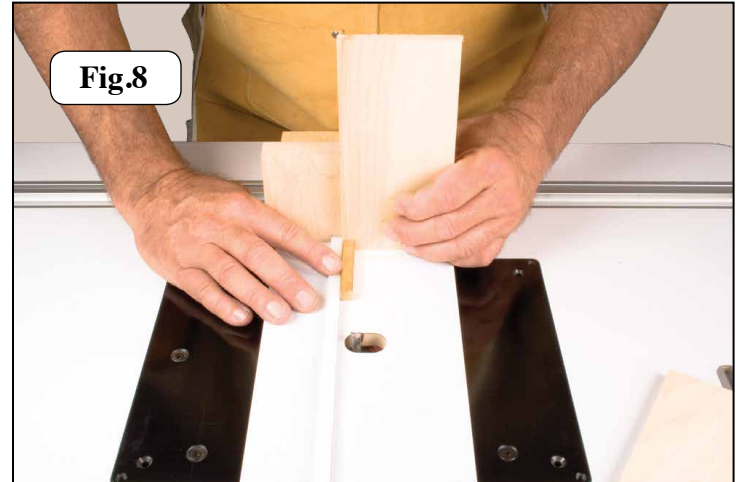
When cutting your joints with the Multi-joint™ spacer system, make sure your stock is flat, and that the edge you will be milling is straight. The unique feature about this system is, you can cut any length or any width stock. You can even cut angle joints. We have prepared our stock width to be divisible by 3/8", that way the joint will be equal on either side. To insure a balanced joint, prepare your stock width so that it is divisible by the width of the spacer fence you will be using.

Shop Notes:

If your stock is not divisible by the size of the spacer fence your are using, the outer finger will be smaller than the rest.

Cutting Two Boards at Once:

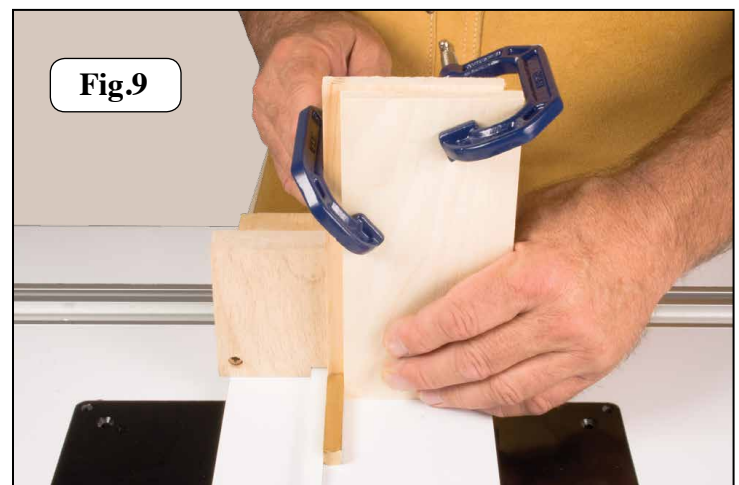
You must off-set one of the boards by 3/8", so when the boards are put together they will line up flush with each other. We start by placing one piece of stock against the edge of the UHMW guide bar and right angle push block. Then set the 3/8" brass bar in front of the first piece of stock against the edge of the UHMW guide bar - (See **Fig. 8**).



Shop Notes:

You can cut one piece of stock at a time, just remember that the second piece of stock must be off-set the distance of the spacer fence size you are using.

Place the second piece to be cut in front of the first piece, aligning the side edge against the 3/8" brass bar and clamp together using two c-clamps (See **Fig. 9**). Remove the brass bar.



Shop Notes:

Always use a minimum of two clamps to prevent the stock from pivoting. Not doing so may result in a sloppy joint or even injury.

Making the Cut:

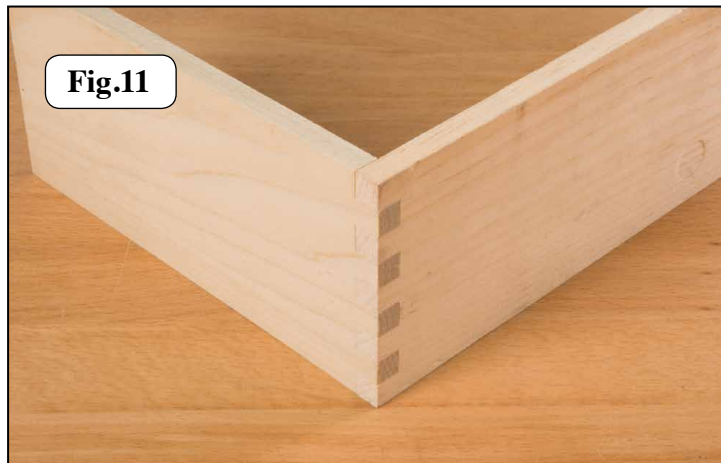
Be sure the cutter is not in contact with the wood surface before turning your router on. With one edge of the stock against the UHMW fence, hold the stock square with the right angle push block, keeping your feed hand to the right side of the bit to feed the stock forward slowly. Feed until the router bit exits the back of the stock into the cut-out we made in the right angle push block. Once the first cut is made, lift the stock off the platform, slide the right angle push block back to give enough clearance from the router bit and keeping your stock clamped together place the cut you just made on to the UHMW guide bar and make the cut. (See **Fig. 10**) Repeat this process all the across the stock until it is completed.



Caution:

Do not force the router bit, or cut too fast, as this may result in tear-out, splintering of the stock, or even loss of control. Moving the stock too slow could result in burning. Feed the stock into the bit at a smooth and controllable rate.

Your completed box joint should resemble the photograph shown below in **Fig. 11**



Adjusting the Fit:

If the fit is too tight, you must adjust the space to be smaller between the UHMW guide bar and router bit. Loosen one f-clamp just enough to allow one end of the jig to be moved. Using a hammer or block of wood, tap the platform toward the router bit (See **Fig. 12**). Once the adjustment has been made, re-secure platform with f-clamp and repeat the cutting process until desired fit is obtained. If the joint is protruding, lower the router bit. If the joint is recessed, raise the router bit.



If the fit is too loose, you must adjust the space to be larger between the UHMW guide bar and router bit. Loosen one f-clamp just enough to allow one end of the jig to be moved. Using a hammer or block of wood, tap the platform away from the router bit (See **Fig. 13**). Once the adjustment has been made, re-secure platform with f-clamp and repeat the cutting process until desired fit is obtained. If the joint is protruding, lower the router bit. If the joint is recessed, raise the router bit.



Cutting All Four Sides at Once:

If all four sides of the box are the same thickness the Multi-joint™ spacer system will allow you to cut all four pieces of a box at one time. To do this, you must first make an off-set block that will align the sides from the front and back. Use a piece of scrap stock 3/4" thick by at least 5" wide and 6" long. With the fence and bit set up correctly for the stock, place the one edge of the stock against the UHMW guide fence and make the cut the length of the stock. Set the cut you just made on the UHMW guide fence, and repeat two more times (See Fig. 14).

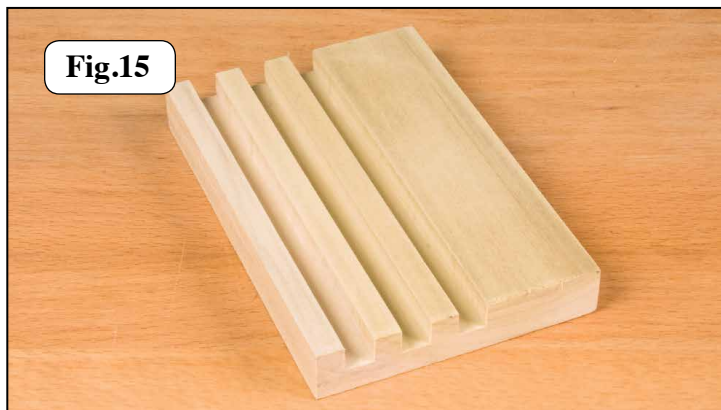


Caution:

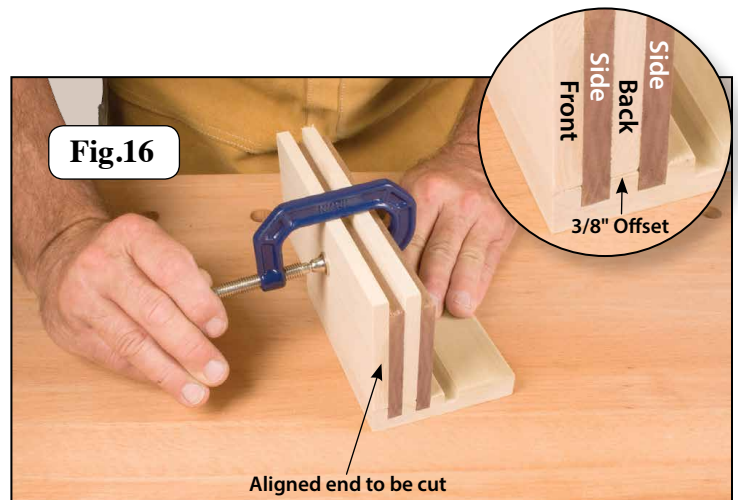
Since the router bit is contacting both sides of the stock when cutting - the stock will tend to drift away from the fence. When making the first cut, keep pressure against the stock and UHMW guide fence to prevent drifting.

NEVER position your hand on top of the stock that would be in line with the router bit. Doing so may result in injury. Always use a push block to make these type of cuts shown above in Fig. 14.

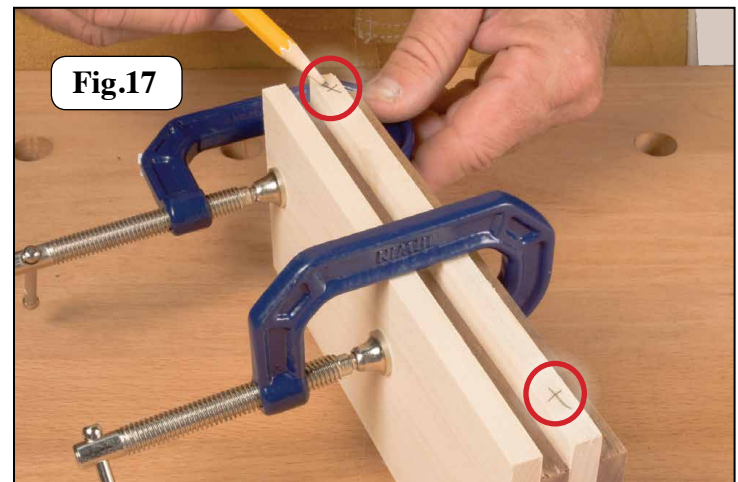
Your completed set up block should resemble the photograph shown below in Fig. 15



Place the sides of the box length wise into the dadoed cuts of the set up block. Place the front and back of the box between the sides of the box on the set up jig (See Fig. 16). Align all four ends of your stock pieces to be flush and clamp together using two c-clamps. This will give you the 3/8" off-set you need for the finger joints to be flush when assembled.



While still clamped, remove the pieces from the set up block and place a mark on each end of the stock that is to be placed against UHMW guide bar. (See Fig. 17).



Shop Notes:

The first cut made on each end will be from the starting edge you have marked. Failing to do so, will result in un-even joints.

Making the Cut:

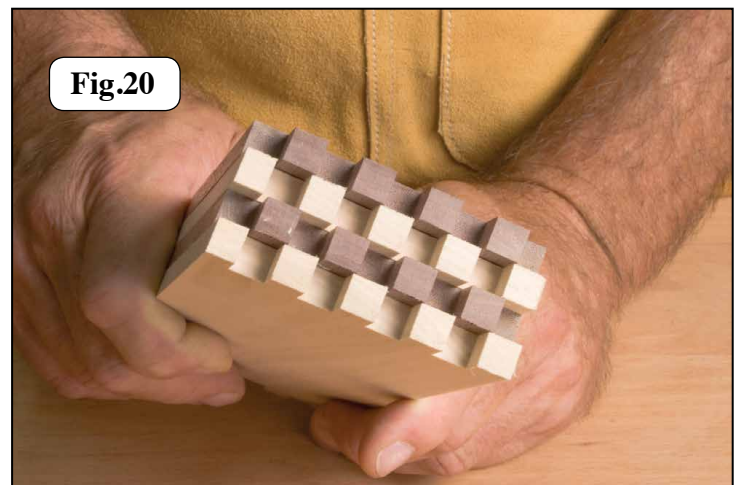
Be sure the cutter is not in contact with the wood surface before turning your router on. With the edge of the stock you just marked against the UHMW guide bar, hold the stock square with the right angle push block. Keep your feed hand to the right side of the bit to feed the stock forward. Slowly feed until the router bit exits the back of the stock into the cut-out we made in the right angle push block. Once the first cut is made, lift the stock off the platform, slide the right angle push block back to give enough clearance from the router bit and keeping your stock clamped together place the cut you just made on to the UHMW guide bar and make the cut. (See **Fig. 18**) Repeat this process all the way across the stock until it is completed.



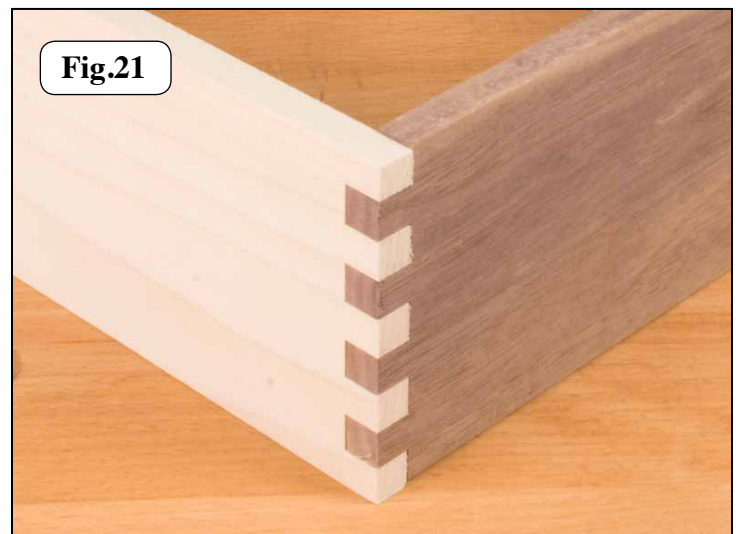
After completing all the cuts on one side, keep all four pieces clamped together and flip over to the opposite end. Placing the same edge of the stock you marked against the UHMW guide bar, hold the stock square with the right angle push block. Keep your feed hand to the right side of the bit to feed the stock forward. Slowly feed until the router bit exits the back of the stock, into the cut-out we made in the right angle push block. Once the first cut is made, lift the stock off the platform, slide the right angle push block back to give enough clearance from the router bit and keeping your stock clamped together place the cut you just made on to the UHMW guide bar and make the cut. (See **Fig. 19**) Repeat this process all the way across the stock until it is completed.



Remove c-clamps and align the edges. Your completed pieces of stock should resemble a checker board pattern shown below in **Fig. 20**



Your completed joint should resemble the photograph shown below in **Fig. 21**



Assemble the box:

Assemble all four sides of the box (See **Fig. 22**). The joints should have a snug - sliding fit. If you have to force the joint together with a mallet, it may result in splitting your stock, as well as forcing the glue out of the joint. To loose of a fit may produce wobbling and a weak joint. If you have the extra 1/32" or more to the joint, it can now be cleaned up by sanding the joints flush after gluing. If satisfied with the fit of your joints, glue, clamp and finish your project. If the joints need adjustment, follow the steps explained earlier in this manual for adjusting the fit on page #6.

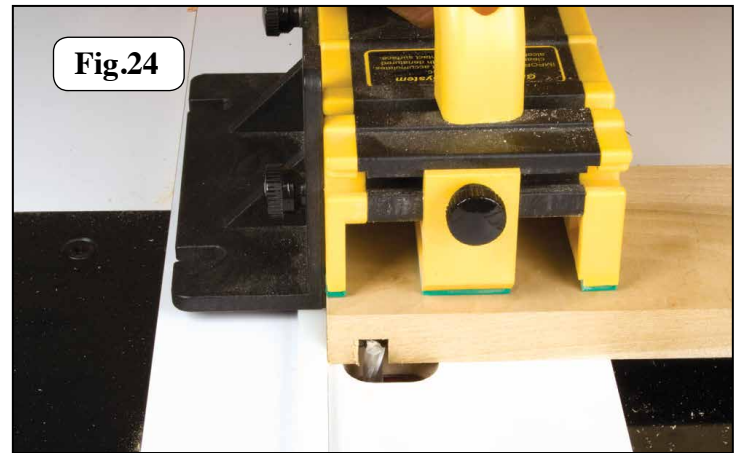


Your completed box should resemble the photograph shown below in **Fig. 23**



Off-Set Rabbet Joints

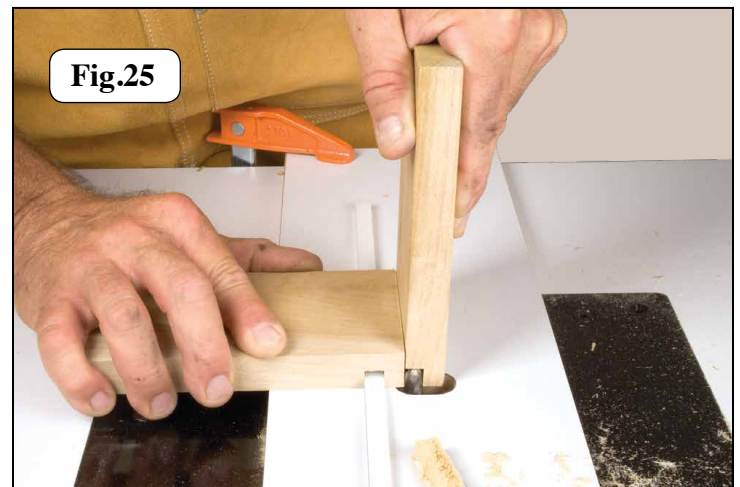
The set-up process for this type of joint is the same process we use for the 3/8" finger joint. In this example, we will be rabbeting two pieces of 3/4" stock. It is important that your stock is exactly 3/4" thick, if not, it may not allow for the joint to align flush. When making this type of cut, always use a push block to feed and hold the stock down as shown. Since the router bit is contacting both sides of the stock when cutting - the stock will tend to drift away from the fence. When making the first cut, keep pressure against the stock and UHMW guide bar to prevent drifting. Your first cut is made with your stock face down and one edge against the UHMW guide bar (See **Fig. 24**).



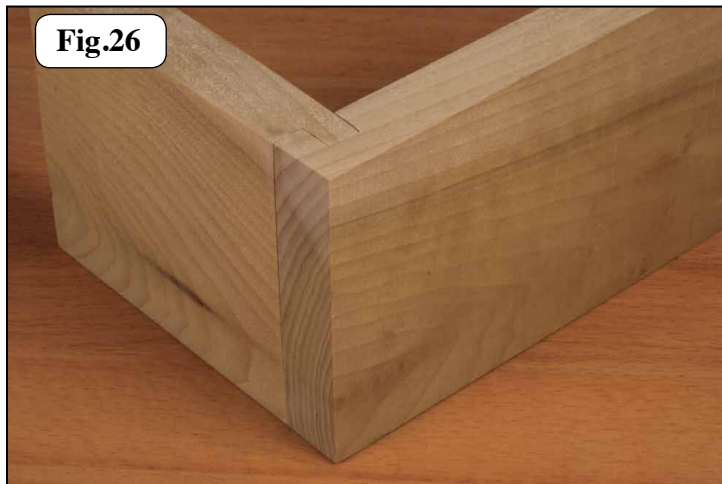
Caution:

DO NOT place your hand over the top of the router bit when making the cut, always use a push block to hold the stock down and feed into the cutter - See **Fig. 24**.

The second cut is made by rotating the first cut you just made 180° and placing it on the UHMW guide bar to make the second cut. Place the second piece of stock upright and hold it at a 90° angle and feed into the cutter. Feed both pieces at the same time (See **Fig. 25**).



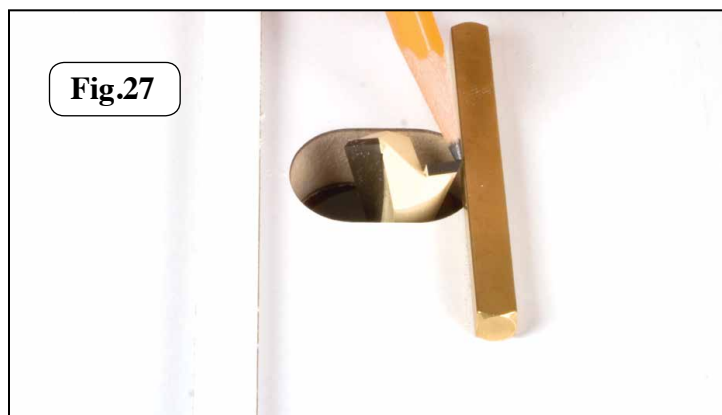
Your completed joint should resemble the photograph shown below in **Fig. 26**. If joint is too tight, make the necessary adjustment until desired fit is obtained.



This type of joinery is excellent for drawer boxes and other types of small projects that need a little extra strength. We also use the first step of this method with the 1/4" fence for cutting the groove for the bottom of drawer boxes.

End To End Dovetail Joints

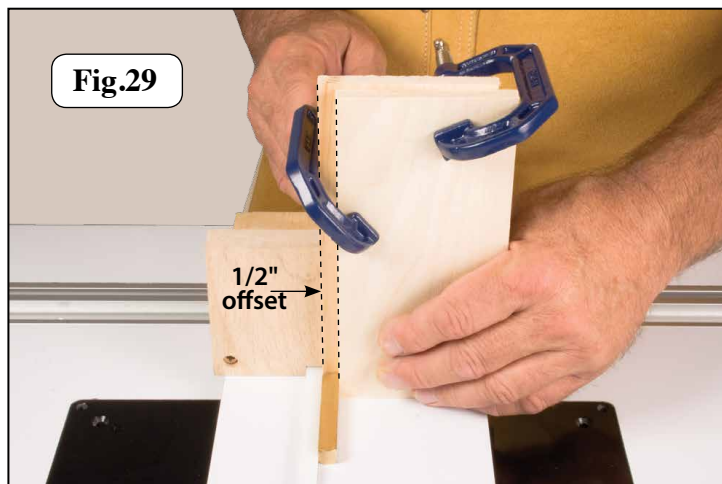
End to end dovetails are primarily used as a decorative type of joint. Most woodworkers will use two different species of wood when making this joint. Place a 1/2" - 14° dovetail router bit (not included) into your router collet and secure the bit in place. Set the 3/8" spacer fence on to your router table with bit centered in the opening of the platform and clamp one end as previously outlined in these instructions on page #3. Set the height of the bit using the 1/4" brass bar (See **Fig. 27**).



Place the short gray set up block on to the UHMW guide bar, adjust the un-clamped end of the fence until the dovetail bit touches the inside edge of the set up block and secure platform in place with clamp (See **Fig. 28**).



You must off-set one of the boards by 1/2", so when the boards are put together they will line up flush. Place one piece of stock against the edge of the UHMW guide bar and right angle push block. Then set the 1/2" brass bar in front of the first piece. Place the second piece to be cut in front of the first piece, aligning the side edge against the 1/2" brass bar and clamp together using two c-clamps (See **Fig. 29**). Remove the brass bar and make first cut.



With your Stock still clamped together, place the cut you just made on the UHMW guide bar and make the second cut (See **Fig. 29b**). Repeat this process the entire width of stock.

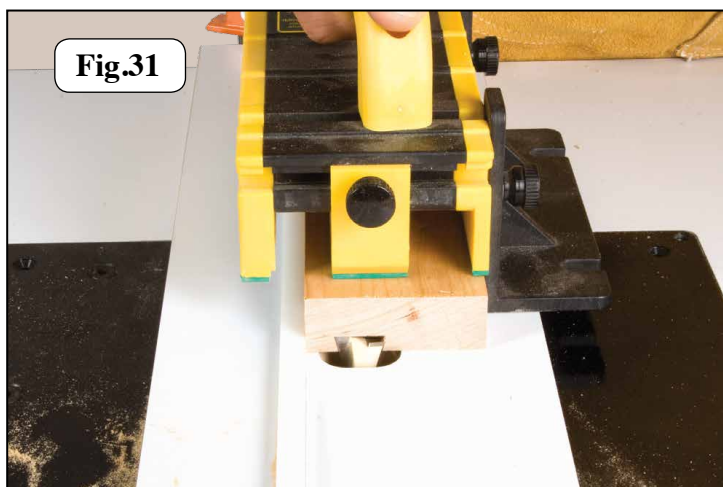


Your completed joint should resemble the photograph shown below in **Fig. 30**. There are two ways to adjust the fit of a this joint. First, raise the height of bit to tighten the joint, lower the bit to loosen the joint. Second is to adjust the platform if edges are not flush, as outlined on page #6.



Drawer Slide Dovetails

Drawer slide dovetails are an easy way to guide any drawer smoothly. Follow the exact same instructions outlined in the End to End dovetail joint (previous) section, with two exceptions: First - instead of standing your stock up on end, you will lay your stock down flat on the table surface (See **Fig. 31**). Second - each piece is cut one at a time. This type of dovetail joint is always made from 3/4" or thicker stock



Caution:

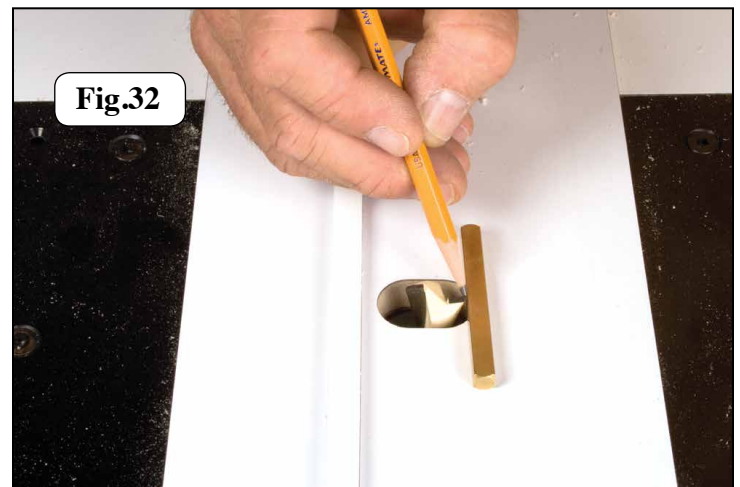
DO NOT place your hand over the top of the router bit when making the cut, always use a push block to hold the stock down and feed into the cutter - (See **Fig. 31**).

Decorative Double Dovetails

Double Dovetails are primarily used as a decorative joint. Use them for edges on drawer boxes, joining straight stock together, bread boards and more. When using this decorative joint, most woodworkers will use two different colors of wood for contrast when making this joint.

Cutting The Center Dovetail

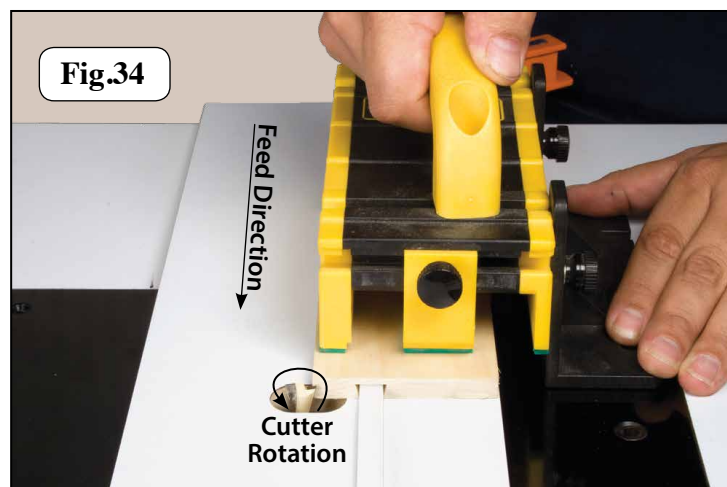
Place a 1/2" - 14° dovetail router bit (not included) into your router collet and secure the bit in place. Set the 3/8" spacer fence on to your router table with bit centered in the opening of the platform and clamp one end as previously outlined in these instructions on page #3. Set the height of the bit using the 1/4" brass bar (See **Fig. 32**).



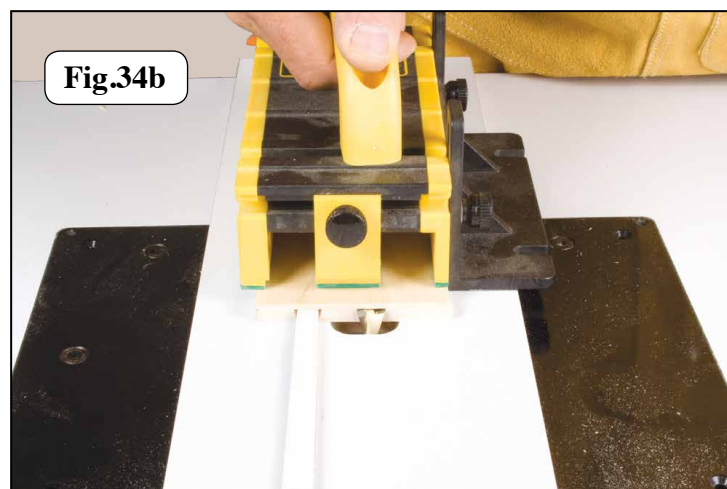
Place the short gray set up block on to the UHMW guide bar, adjust the un-clamped end of the fence until the dovetail bit touches the outside edge of the set up block (See **Fig. 33**) and secure platform in place with clamp. Remove set up block.



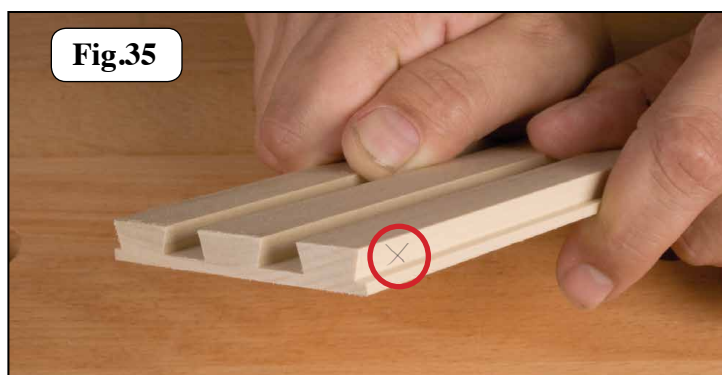
With the fence and bit set up correctly for the stock, place one edge of the stock against the UHMW guide fence and make the cut the length of the stock. Next, rotate the stock 180°, place the first cut on the UHMW guide bar - feeding from the OPPOSITE direction and make the relief cut (See **Fig. 34**). The reason we have rotated the stock around 180° and fed from the opposite direction is so that the stock does not pull through the cut, giving you a more controllable cut and a smoother finish.



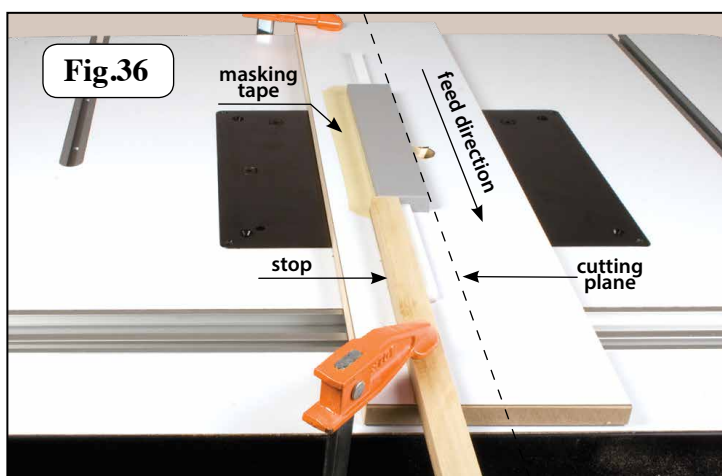
After making the relief cut, rotate the stock back around 180° and feeding from the same direction we made the first cut from, place the first cut back onto the UHMW guide bar and make the third cut (See **Fig. 34b**). Place the cut you just made on the UHMW guide bar, repeating this last process across the entire width of the stock until complete.



Place a mark on the edge of the stock where you made your first cut. Your completed stock should resemble the photograph shown in **Fig. 35**



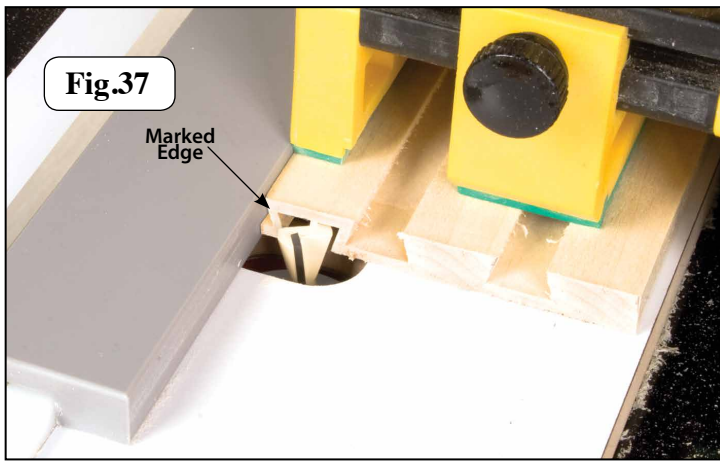
Your next cut is made using the long gray off-set fence as a sub-fence. Place the sub-fence on the UHMW guide bar, with the flat surface facing the router bit, leaving equal distance in the front and back of the router bit. Next, clamp a scrap piece of wood (a stop) behind the long off-set fence to prevent it from sliding forward when making the cut. Place a piece of masking tape length wise on the long gray sub-fence to prevent it from lifting - (See **Fig. 36**).



Shop Notes:

When cutting longer stock, you must make sure that the clamp heads DO NOT interfere with the cutting plane, shown above in **Fig. 36**. If the stock you are milling is longer than 20", we recommend you make a longer sub-fence for better support.

With the fence and router bit set up correctly for the stock, place the edge you marked earlier against the UHMW guide fence, then make the cut the length of the stock (See **Fig. 37**). Once cut is made, turn off router and remove the long sub fence, the wooden stop block and re-secure platform with clamp.



After removing the long off-set sub fence. Place the cut you just made on the UHMW guide bar and make the second cut (See Fig. 38). Repeat this process the entire width of stock.



Caution:

The Long off-set fence is ONLY used to make the first cut, DO NOT use for any other cut. Doing so may result in injury.

Your completed stock should resemble the photograph shown below in Fig. 39.



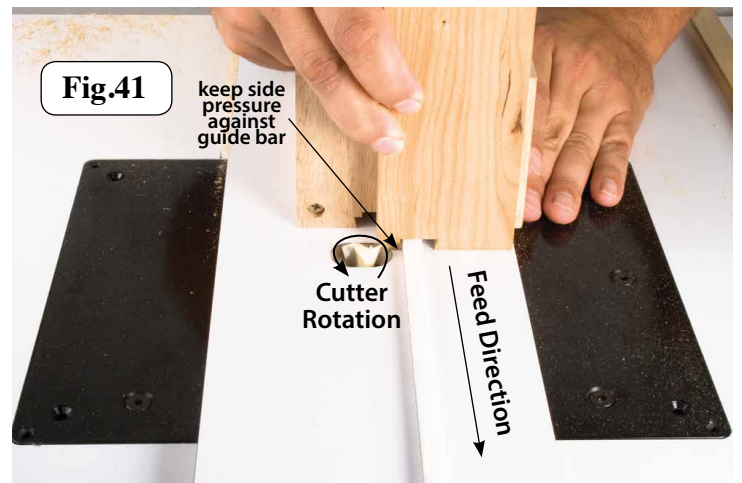
Cutting The Outside Dovetails

Now that we completed our insert piece, we need to change the router bit and adjust the fence. Unplug your router, remove the 1/2" - 14° dovetail bit and replace with a 3/4" - 14° dovetail bit (not included) and secure in router collet. Set the router bit to exactly the same height as the 1/2" dovetail bit used to cut the center dovetail on page #11. Next, loosen a clamp at one end of the platform, just enough to allow you to pivot the fence for this adjustment. Place the short gray set up block on to the UHMW guide bar, adjust the un-clamped end of the fence until the dovetail bit touches both edges of the set up block (See Fig. 40) and secure the platform in place with clamp.

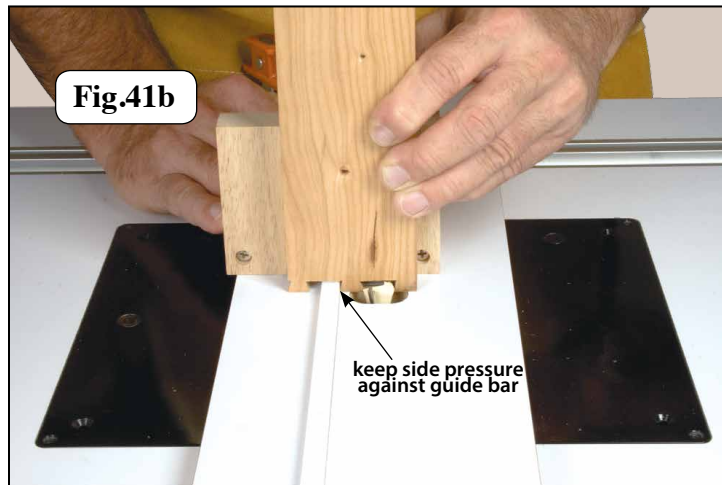


First Cut - Outside Dovetail

With the fence and bit set up correctly for the stock, place one edge of the stock against the UHMW guide fence and right angle push block and make the cut. Next, rotate the stock around 180°, place the first cut on the UHMW guide bar - feeding from the OPPOSITE direction and make the relief cut (See Fig. 41). The reason we have rotated the stock around 180° and fed from the opposite direction is so that the stock does not pull through the cut, giving you a more controllable cut and a smoother finish.



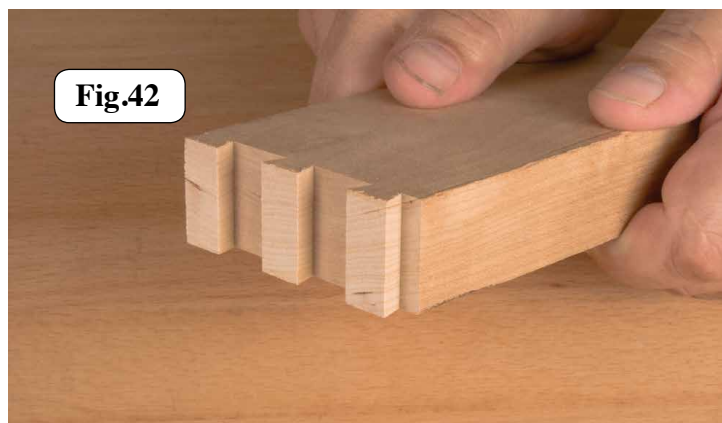
After making the relief cut, rotate the stock back around 180° and feeding from the same direction we made the first cut from, place the first cut back onto the UHMW guide bar and using the right angle push block make the third cut (See **Fig. 41b**). Place the cut you just made on the UHMW guide bar, repeating this last process across the entire width of the stock until complete.



Shop Notes:

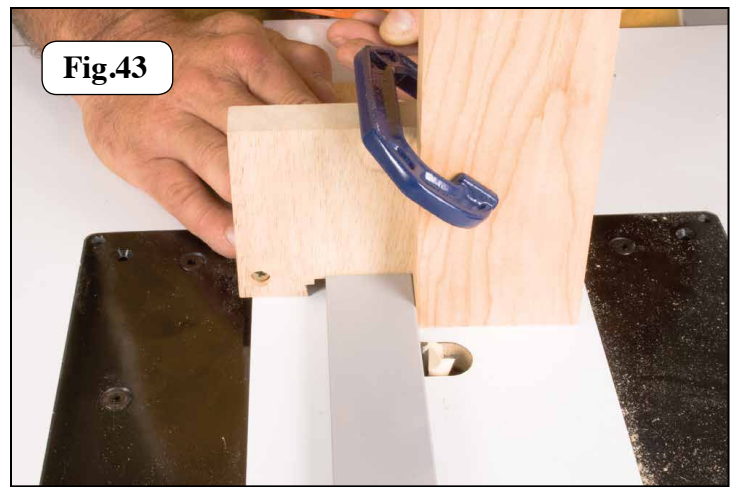
When feeding from the opposite direction with the right angle push block, be sure to make a relief cut for the particular router bit you are using - see page #5

Your completed stock should resemble the photograph shown in **Fig. 42**



Second Cut - Outside Dovetail

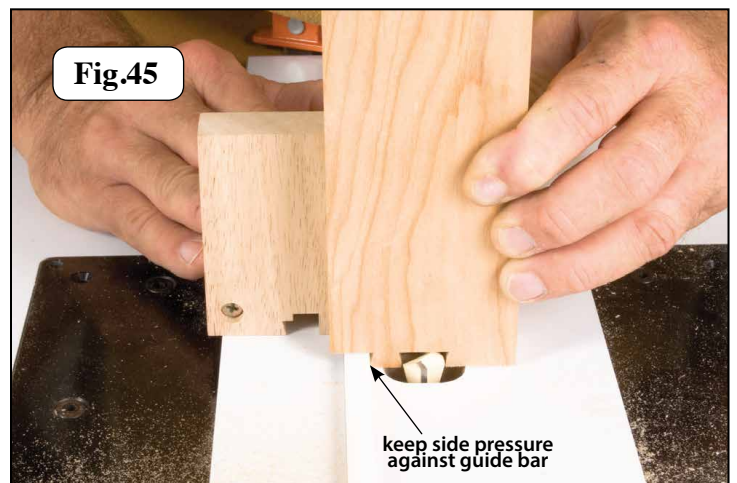
Unplug your router for this set-up process. To make the second cut of the joint, you will be using the long gray off-set fence to set up the first cut. Place the sub-fence on the UHMW guide bar, with the dovetailed surface facing the router bit. Next, place the right angle push block on the UHMW guide bar, slide the stock to be cut against the edge of the gray set-up block and c-clamp the stock to the right angle push block. (See **Fig. 43**).



Remove the long gray off-set fence. **DO NOT** make this cut with long gray off-set fence in place. Doing so may result in injury. Plug the router back in, and slowly feed your stock through the cutter. (See **Fig. 44**).



Remove c-clamp from stock and using the right angle push block, position the first cut on the UHMW guide bar, keeping pressure to one side of the guide bar, and make the second cut (See **Fig. 45**). Repeat this process the entire width of the stock.



Your completed stock should resemble the photograph shown below in **Fig. 46**



Assemble the Double Dovetail:

The joints should have a snug - sliding fit (See **Fig. 47**). If you have to force the joint together with a mallet, it may result in splitting your stock, as well as forcing the glue out of the joint. To loose of a fit may produce wobbling and a weak joint. If satisfied with the fit of your joints, trim, glue, clamp and finish your project. There are two ways to adjust the fit of this joint if needed. First adjust the fence as shown on page #6. Second adjust the bit, if the joint is too loose, you will slightly raise the dovetail router bit. If the joint is too tight, you will slightly lower the router bit.



Shop Notes:

When making this joint, the center double dovetail will not align to the outside edge and may need to be trimmed or sanded flush.

Sliding Double Dovetail

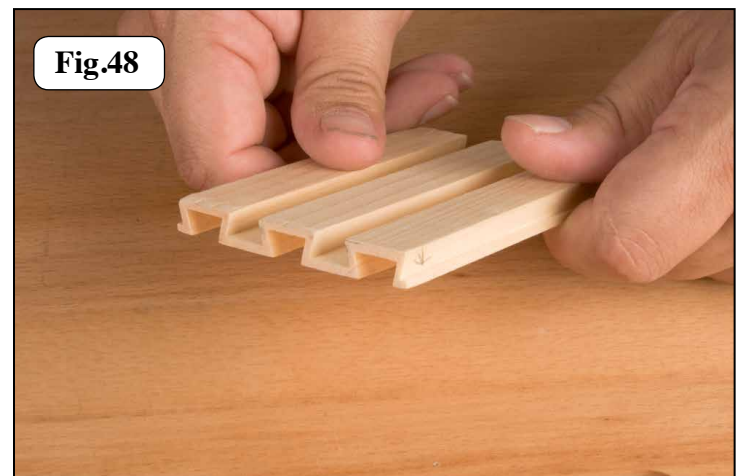
The most popular use for this joint is, sliding table extensions or drawer slides. When making this joint, we recommend that the center stock is made from a different species of wood than the outer two pieces of stock. The reason for this; if all pieces are made from the same species of wood, it may cause excessive wear or binding. When using this joint to make extended table slides, the center double dovetail stock should be at least 1" thick for support. The thickness of the stock does not change the bit height when making this joint. This joint can also be used as decorative joint.

Shop Notes:

When making sliding double dovetails, you will use the same set up process shown in CUTTING DECORATIVE DOUBLE DOVETAILS to set the location of the fence and bit height. Once set, follow instructions below.

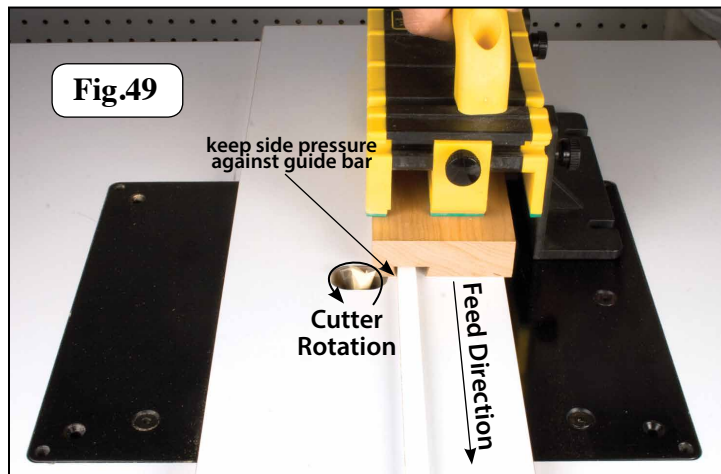
Cutting the Center of the Double Dovetail

The first step of cutting this joint is making the center slide double dovetail. Refer the page #11 of this manual on Cutting The Center Dovetail. After following the instructions your stock should resemble the photo shown below (See **Fig. 48**). This joint is exactly the same as the decorative double dovetail.

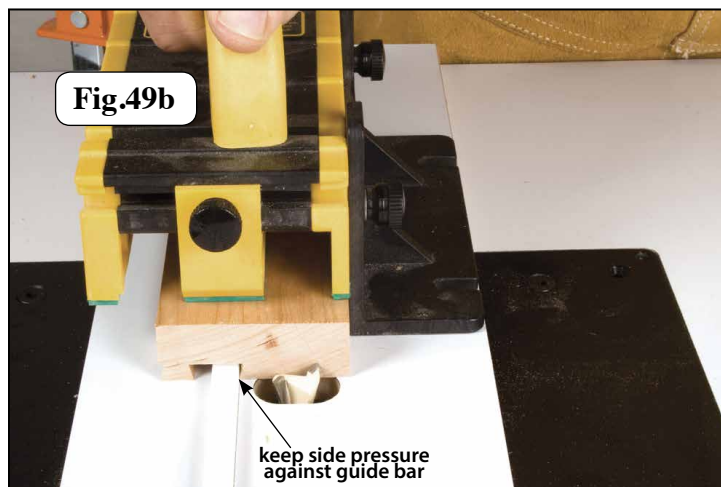


Top / Bottom of Double Dovetail Cut

To finish your sliding double dovetail, you must cut a top and bottom of the joint. To set up the bit and fence for this cut refer to page #13, Cutting Outside Dovetails. With the fence and bit set up correctly, place the stock flat on the platform, with one edge against the UHMW guide fence and using a push block, make the cut. Next, rotate the stock around 180°, place the first cut on the UHMW guide bar - feeding from the OPPOSITE direction and make the relief cut (See **Fig. 49**). The reason we have rotated the stock around 180° and fed from the opposite direction is so that the stock does not pull through the cut, giving you a more controllable cut and a smoother finish.



After making the relief cut, rotate the stock back around 180° and feeding from the same direction we made the first cut from, place the first cut back onto the UHMW guide bar and make the third cut (See **Fig. 49b**). Place the cut you just made on the UHMW guide bar and make the cut, repeating this last process across the entire width of the stock until complete.

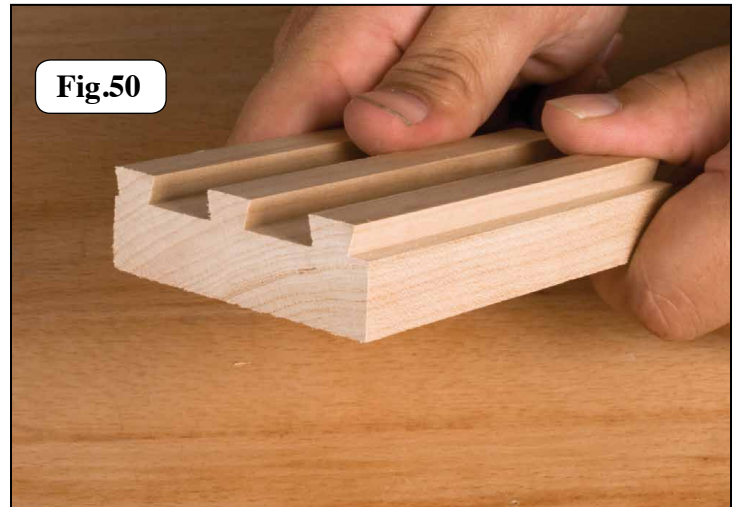


Caution:

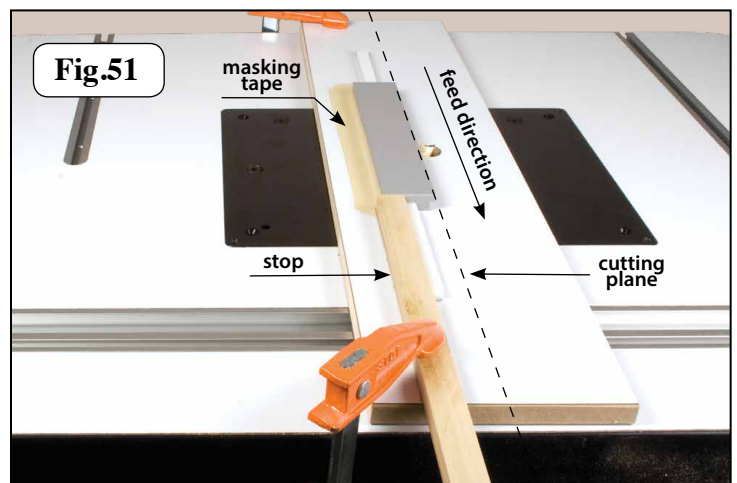
Since the router bit is contacting both sides of the stock when cutting - the stock will tend to drift away from the fence. When making any cut, keep pressure against the stock and UHMW guide fence to prevent drifting.

NEVER position your hand on top of the stock that would be in line with the router bit. Doing so may result in injury. Always use a push block to make these type of cuts shown in **Fig. 49**.

Your completed stock should resemble the photograph shown in **Fig. 50**



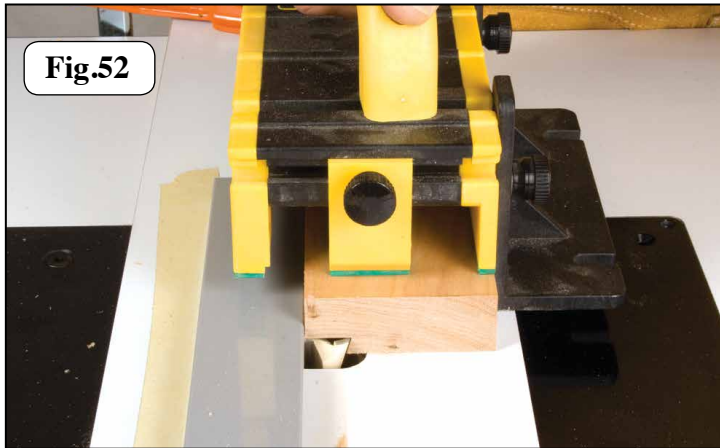
Your second piece of stock on this joint is made using the long gray off-set fence as a sub-fence. Place the sub-fence on the UHMW guide bar, with the dovetailed surface facing the router bit, leaving equal distance in the front and back of the router bit. Next, clamp a scrap piece of wood (a stop) behind the long off-set fence to prevent it from sliding forward when making the cut. Place a piece of masking tape length wise on the long gray sub-fence to prevent it from lifting. (See **Fig. 51**).



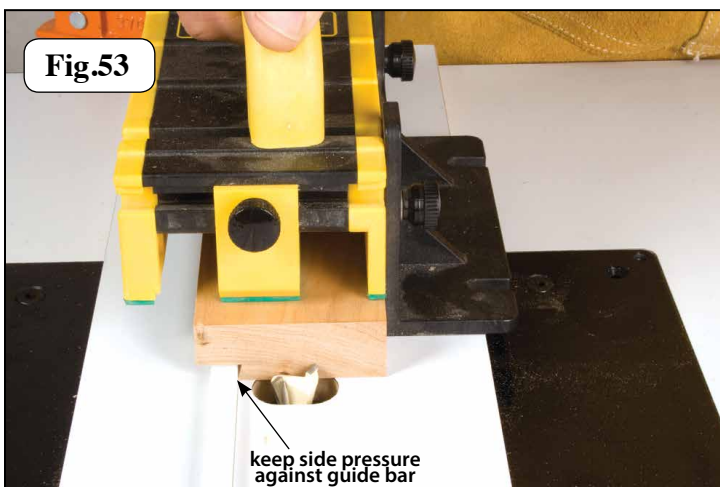
Shop Notes:

When cutting longer stock, you must make sure that the clamp heads DO NOT interfere with the cutting plane, shown in **Fig. 51**. If the stock you are milling is longer than 20", we recommend you make a longer sub-fence for better support.

With the fence and router bit set up correctly for the stock, place the stock flat on the platform with one edge against the UHMW guide fence, then make the cut the length of the stock (See **Fig. 52**). Once cut is made, turn off router and remove the long sub fence and the wooden stop block and re-secure platform with clamp.



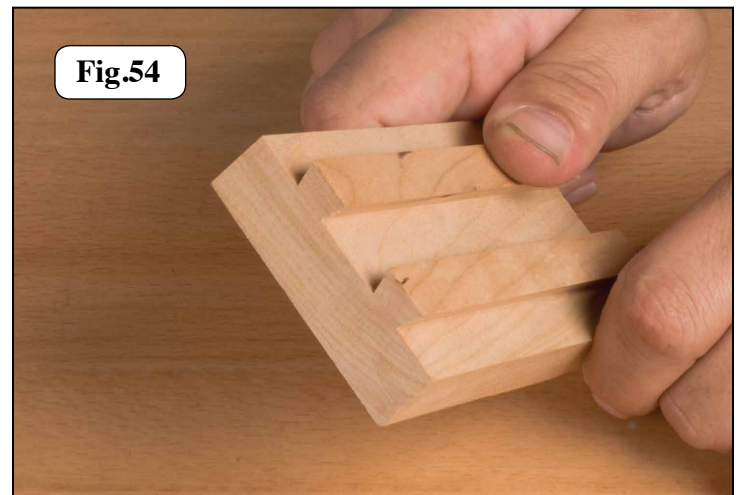
After removing the long gray off-set sub fence. Place the cut you just made on and against the UHMW guide bar and make the second cut keeping side pressure against guide bar (See **Fig. 53**). Repeat this process the entire width of stock.



Caution:

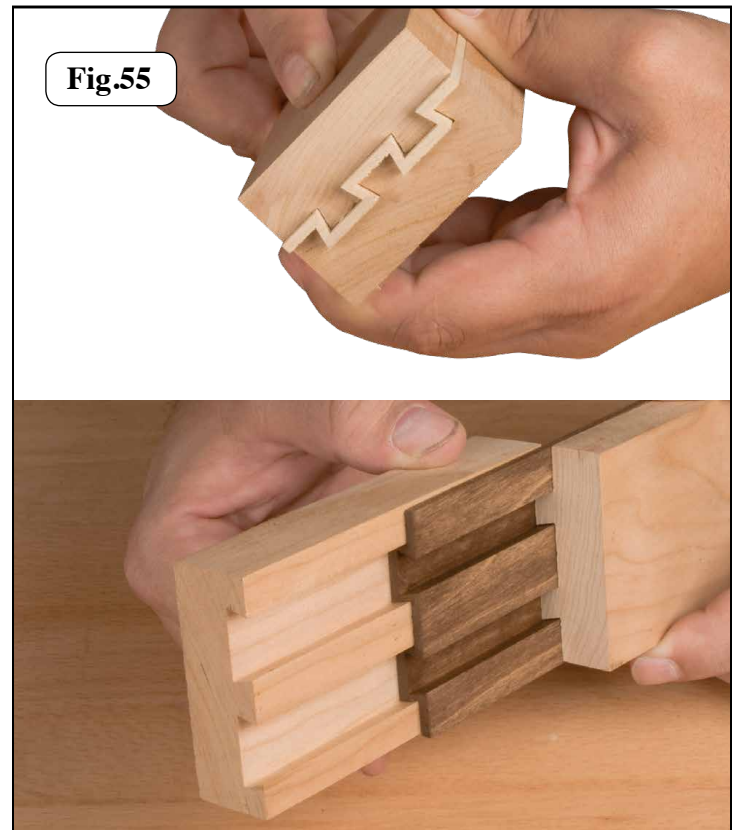
The Long off-set fence is ONLY used to make the first cut, DO NOT use for any other cut. Doing so may result in injury.

Your completed stock should resemble the photograph shown below in **Fig. 54**



Assemble the Sliding Double Dovetail:

The joints should have a smooth - sliding fit (See **Fig. 55**). If you have to force the joint together with a mallet, it may result in splitting your stock. To loose of a fit may produce wobbling and a weak joint. There are two ways to adjust the fit of this joint if needed. First adjust the fence as shown on page #6. Second adjust the bit, if the joint is too loose, you will slightly raise the dovetail router bit. If the joint is too tight, you will slightly lower the router bit.



Shop Notes:

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

[illegible]

Shop Notes:

When making this joint, the center double dovetail will not align to the outside edge and may need to be trimmed or sanded flush. An easy rule for adjusting the fit of a dovetail joint is; heighten the bit to tighten the joint, lower the bit to loosen the joint (tighty - tighty, lower - loosey).

Multi-Joint™ Spacing System

The Peachtree Multi-Joint™ Spacing System is one of the most versatile jigs available. In this manual we have outlined several different types of joints as well as thickness stock that can be made. This manual is also dotted with our "shop notes" to make things just a little easier for you. The possibilities that can be applied are virtually endless. Thank you for your purchase and we hope you enjoy your brand new Multi-Joint™ Spacing System!



Peachtree Multi-Joint™ Spacing System.
For accessory router bits, visit us online at
www.ptreeusa.com or call us toll free at:
1-888-512-9069

Multi-joint tips:

Cutting larger stock:

When cutting long, wide stock, the f-clamps we use to use to hold our Multi-joint™ to our router table will interfere with the cut. After you have set-up the fence, drill and counter sink through the fence and table top, and secure the Multi-joint™ platform with screws. It is also recommended to support wider stock that is not resting on the platform.

Dovetail Joint Not Fitting:

In most cases this is caused by the router bit not being set at the correct height. Heighten the bit to tighten the joint, lower the bit to loosen the joint.

Edges Not Flush:

If the edges of the joint are not flush, or the fingers / dovetails are not lining up, this is caused by the space between the router bit and the fence are not correct. Follow the instructions on page #6 to adjust the fence.

Router Bits:

Keep in mind the Multi-Joint™ relies on the router bit to match the UHMW bar of the fence. A router bit that has been sharpened or is dull, may be slightly smaller. This can effect the alignment of any joint.



Create joints like these with the
Multi-joint™
spacing system

Sliding Dovetail



1/4" box joint



3/8" box joint



1/2" box joint

